U.S. Department of Agriculture
Small Business Innovation Research Program

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Features of USDA SBIR Program

- Award Grants only; awards based on scientific/technical merit; ideas investigator-initiated.
- Nine broad topic areas.
- Funds allocated to topic areas in proportion to number of proposals received.
- Phase I Grants: 6 months at $65,000. Phase II Grants: 2 years at $250,000.
- Proposals reviewed by confidential peer review using outside experts from non-profit organizations.
- All applicants receive verbatim copies of reviews.
- Follow-on funding commitment strongly encouraged.

Topic Areas

Forests and Related Resources
Plant Production and Protection
Animal Production and Protection
Air, Water, and Soils
Food Science and Nutrition
Rural and Community Development
Aquaculture
Industrial Applications
Marketing and Trade

Rural and Community Development

1. New Agricultural Enterprises
2. Transportation
3. Education
4. Health Care
5. Information Services
6. Telecommunications

Marketing and Trade

1. Development of Marketing Systems
2. Development of Innovative Real-Time/Near-Time Information Systems
3. Assessments and Specification of Marketing Opportunities

Example of Winning Proposal

Ms. Marcia Smith, Columbia Cascade, Inc., Reston, VA
International Trade Assistance for Rural Areas Using Expert System Technology

History of USDA SBIR Funding

FY	Budget (x 10^6)	Phase I	Phase II
90	4.11	32/314	13/17
91	4.89	36/296	16/22
92	5.63	44/346	19/30
93	7.02	53/380	23/35
94	7.17	60/443	22/36
95	9.29	72/445	27/41
96	9.10	63/428	33/60
97	11.40	72/401	29/47

Geographical Distribution of USDA SBIR Winners, FY 83-FY 97

California	West	Northeast	North Central	South
CA-117	WA-43	MA-52	MN-31	FL-23
	OR-40	PA-38	MI-31	TX-23
	CO-29	NY-31	OH-20	VA-21
	AZ-20	NJ-19	WI-16	NC-19
	ID-19	MD-15	IL-15	TN-9
	HI-18	CT-14	ND-13	LA-9
	MT-12	DC-6	NE-11	GA-8
	UT-10	VT-6	SD-10	OK-6
	NM-10	NH-4	IA-9	MS-5
	AK-6	WV-1	IN-9	AR-3
	WY-4	RI-0	KS-9	SC-3
	NV-0	ME-0	MO-8	AL-2
		DE-0		KY-1
				VI-1
117	211	186	182	133
(14.1%)	(25.5%)	(22.4%)	(22.0%)	(16.0%)

Solicitation/Proposal Schedule, FY 1998

1. Solicitation released on 6/1/97
2. Proposal due date of 9/4/97
3. Panels meet in January and February of 1998
4. Decisions made by 3/1/98
5. Phase I Grant Period is from 5/15/98 to 11/30/98
6. Phase II Application Deadline is 2/12/98

Internet Sites of Interest

SBA http://www.sbaonline.sba.gov

USDA http://www.usda.gov

USDA/SBIR http://www.reeusda.gov/sbir/sbir.htm

CRIS http://cristel.nal.usda.gov:8080

Commercialization Results

Year	No. Awards	Positive Impact	Percent	Sales	Percent
1988	14	10	71	8	57
1999	13	9	69	5	38
1990	13	9	69	6	46
1991	16	12	75	10	63
1992	19	14	74	12	63
1993	23	21	91	13	57
1994	22	20	91	13	59
Total	120	95	79	67	56

Distribution of Sales for Phase II Awardees, FY 1988 - 1994

Range	Number
< $10,000	3
$10,000-99,999	7
$100,000-499,999	14
$500,000-999,999	4
> $1 million	7

University Involvement in USDA SBIR

1. Strongly encouraged.

2. University faculty can serve as consultants or can receive a subcontract (in both cases, limited to no more than 1/3 of Phase I award or 1/2 of Phase II award) and continue to work full-time at university.

3. University faculty can serve as principal investigator on the grant, if they reduce employment at the university to 49 percent for duration of grant, and if the SBIR research is performed some place other than their research lab.

4. It is usually not acceptable for university faculty to serve as consultants and have all the research done in their lab.

USDA SBIR Review Process for Phase I

1. There is a different review panel for each topic area.

2. An outstanding research scientist is selected as topic manager for each review panel.

3. Proposals undergo initial screening and then are assigned to the appropriate topic area.

4. Each proposal is sent to six ad-hoc reviewers who mail in written reviews.

5. Each proposal is reviewed by two members of the review panel.

6. Based on both the panel and ad-hoc reviews and the panel discussion, each proposal is ranked and the top ranked ones are recommended for award.

7. The SBIR program follows the panel recommendations very closely, and allocates funds to each topic area in proportion to the number of proposals submitted.

8. Those proposals recommended for funding undergo an administrative review prior to the grant being awarded.

9. A panel summary plus verbatim copies of the reviews, minus the score and name of the reviewer, are sent to the principal investigator for all proposals, funded or not.

USDA SBIR Review Process for Phase II

1. Each proposal is sent to six to eight ad-hoc reviewers who are experts on some aspect of the proposal.

2. The ad-hoc reviews for all proposals in a given topic area are sent to the topic manager who provides a rank order for the proposals, based on his/her reading of the ad-hoc reviews and of the proposals.

3. The rankings from each topic manager are presented to an internal panel consisting of program managers from the National Research Institute. Based on their reading of the proposals, the ad-hoc reviews and justifications from the topic managers for their rankings, the panel establishes the final rank order for the proposals in each topic area.

4. The SBIR program uses these rankings to determine which proposals should be funded and at what dollar level. Other factors that are considered at this point include follow-on funding agreements and prior success in commercializing technologies developed SBIR support.

Evaluation Criteria

1. Scientific/technical merit.
2. Degree to which Phase I objectives were met and feasibility demonstrated (Phase II only).
3. Importance of problem to American agriculture or rural development.
4. Probability of commercial success.
5. Adequacy of research objectives.
6. Adequacy of research plan.
7. Qualifications of Principal Investigator and other key personnel.
8. Adequacy of facilities.
9. Qualifications of consultants.
10. Letters from consultants indicating their willingness to work on project are included as part of the proposal.
11. Adequacy of bibliographies for the Principal Investigator, other key personnel, and consultants.

Elements Common to Successful Proposals

1. Well written, succinct, and logical.
2. Thorough literature review.
3. Addresses important problem.
4. Innovative approach.
5. Well designed and detailed experimental plan.
6. If successful, would have good commercial potential.

Common Proposal Criticisms

1. Poorly written and presented.
2. Principal Investigator lacks necessary technical expertise.
3. Insufficient literature review.
4. Insufficient technical information.
5. Cannot be completed in 6 months.
6. Inadequate bibliographical information.
7. Lacks letters from consultants.
8. Research already done by others.
9. Too vague and unfocused.
10. Failure to indicate where project would go in Phase II.
11. Poor commercialization potential.
12. Doubtful economic prospects.
13. Inadequate detail in experimental plan.
14. Too much research done at university.
15. Need to engage consultants to add expertise in area where Principal Investigator is deficient.